

Obituaries

Maurice Hilleman

Microbe hunter, pioneering virologist, and the 20th century's leading vaccinologist

Maurice Hilleman was responsible for developing more than 40 vaccines, including measles, mumps, hepatitis A, hepatitis B, meningitis, pneumonia, *Haemophilus influenzae* bacteria, and rubella. His vaccines have been credited with saving millions of lives and with eradicating common childhood diseases. The measles vaccine alone has prevented approximately one million deaths. Among other accomplishments, he succeeded in characterising and isolating many viruses, including the hepatitis A vaccine in culture.

Despite Hilleman's many breakthroughs in immunology and vaccinology, he has never been a household name. Anthony Fauci, director of the US National Institute of Allergy and Infectious Diseases, said Hilleman had "little use for self credit." Dr Fauci told the *BMJ* that Hilleman's contributions were "the best kept secret among the lay public. If you look at the whole field of vaccinology, nobody was more influential."

Hilleman's interest in microbiology and science had its roots in his childhood. Born in 1919, he grew up during the Great Depression on a farm in the southeastern plains of Montana. To help his family through the Depression, he needed to be economical and tenacious. It was a building block he later used for keeping his focus.

After the Depression, he entered Montana State University on a full scholarship. In a 1999 issue of *Immunological Reviews*, he



described Montana State as a "no-nonsense institution where professors taught and where teaching assistants, other than laboratory aides, did not exist." He gained a bachelor's degree in microbiology and chemistry.

His graduate education at the University of Chicago reinforced his independence and self reliance. It was a tough environment, in which Hilleman said you would either "sink or swim." In 1944 he was awarded a PhD in microbiology and chemistry. Hilleman told his professors at Chicago that he was going into industry, where he thought he would be best positioned not only for conducting research, but also for ensuring and expediting clinical applications. His professors told him that he belonged in academia and that they had not trained him for a career in industry. Hilleman strongly disagreed, maintaining that academic institutions lacked the resources to move scientific innovations forward and to market.

Paul Offit, chief of infectious diseases at the Children's Hospital of Philadelphia, told the *BMJ*, "His commitment was to make something useful and convert it to clinical use. Maurice's genius was in developing vaccines, reliably reproducing them, and he was in charge of all pharmaceutical facets from research to the marketplace." Hilleman felt that scientists had a responsibility to provide a return on knowledge gained in the laboratory.

In 1944 he joined the virus laboratories of E R Squibb & Sons in New Brunswick, New Jersey, where he developed a vaccine against Japanese B encephalitis, urgently needed to immunise troops fighting in the Pacific.

Hilleman characterised several viruses and identified changes that could result when a virus mutated. This concept, which he worked out while at the Walter Reed Institute of Army Research, helped prevent a huge pandemic of Hong Kong flu in 1957. Learning that the flu was a new strain, 40 million doses of vaccine were rapidly made available in the United States.

He joined Merck on New Year's Eve, 1957, as director of a new department of virus and cell biology research. Under Hilleman's aegis, by 1984 Merck had garnered 37 product licences, with an additional three vaccines ready for development. He retired from Merck at age 65, but stayed on as a consultant.

Hilleman's style of working was iconoclastic. Dr Offit said, "To give you an example of how he worked, in 1963, [when his daughter had the classic symptoms of the mumps,] he swabbed the back of his daughter's throat, brought it to the lab to culture, and by 1967, there was a vaccine." He added, "Today's regulation would preclude that from happening . . . If Maurice was alive today, I doubt he would be able to be Maurice. He was a very strong willed person and a person like him could face a high level of inertia."

During his more than 60 years in basic and applied research, he earned a reputation as an often harsh, impatient fellow who tangled with industry and government bureaucracies. Hilleman defended his pushy and prickly behaviour, which offended some colleagues and coworkers, as crucial for science to advance. He argued that politics, not science, determined which breakthroughs were brought to the marketplace.

Hilleman received many honours, including a special lifetime achievement award from the World Health Organization.

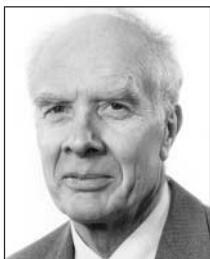
He leaves his second wife, Lorraine; two daughters; and five grandchildren. [LAURA NEWMAN]

Maurice Hilleman, microbiologist Philadelphia, United States (b Miles City, Montana, 1919), died from cancer on 11 April 2005.

Advice

We will be pleased to receive obituary notices of around 250 words. Pressure on space means that in most cases we will be able to publish only about 100 words in the printed journal, but we can run a fuller version on our website. We will take responsibility for shortening. We do not send proofs. Good quality, original photographs are welcome. Please give a contact telephone number and, where possible, supply the obituary on a disk or by email to obituaries@bmj.com. If sending a picture electronically, please attach as a jpeg or a tiff rather than as part of a Word document. We need to know the year of birth and exact date of death of the deceased, and we prefer obituaries to state the cause of death. Please spell out abbreviations.

Robert Harold Champion



Consultant dermatologist Addenbrooke's Hospital, Cambridge, 1961-91 (b Kent 1929; q Cambridge/Middlesex Hospital Medical School 1953; MA, FRCP), died from acute leukaemia on 16 October 2004.

It was during a house job at Addenbrooke's that Bob met Arthur Rook, who inspired him to become a dermatologist. Following his senior registrar post at St Thomas's Hospital he returned to Addenbrooke's as a consultant in 1961. He co-edited later editions of *Rook's Textbook of Dermatology*, edited the *British Journal of Dermatology*, and cowrote a much cited monograph on urticaria. He became president of the British Association of Dermatologists in 1988. He was an avid collector of jade, postage stamps, and more recently revenue stamps and licences. In later years he learnt to play the flute. Predeceased by his two sons, he leaves a wife, Phyllis, and a daughter. [RICHARD J PYE, STEPHEN ROBERTS]

John William Fasham



*Former house officer Isle of Wight and Dorchester (b 1979; q Southampton 2003), died on 13 February 2005 after jumping into a lake. John began studying medicine at Southampton University in 1998 and featured in several episodes of the BBC medical docusoap *City Hospital*. After graduating he completed his house jobs on the Isle of Wight and in Dorchester. At the first opportunity he escaped to New Zealand, where the lure of outdoor pursuits and extreme sports satisfied his thirst for adventure. On the day he died John was happy and satisfied, having fun with friends as he jumped into a lake at a local beauty spot. John was a committed Christian. [KATRINA CATHIE]*

Robert Somerled Cameron Fergusson



Former general practitioner Beaulieu near Inverness (b 1923; q Edinburgh 1947; FRCP, MBE), d 16 February 2005.

Somerled became a general practitioner in Lochinver in 1953 and a founding member of the Royal College of General Practitioners. In the snowy winter of 1955 he recorded one single home visit taking nine hours to complete, and three others involving 30 miles by fishing boat, 24 miles by tractor, and 40 miles by helicopter. He moved to Beaulieu in 1963, where he worked until his retirement in 1988. Somerled became a fellow of the BMA in 2002. Outside medicine he loved fishing and stalking. He leaves a wife, Elizabeth, and two children. [JAMES McLARDY]

Leo Wollner

Consultant physician in general and geriatric medicine Oxford 1963-89 (b 1924; q Guy's Hospital, London, 1951; MA, FRCP), d 8 February 2005.

Leo Wollner made important contributions to the development and standing of geriatric



medicine. Born in Vienna, he escaped to England in 1938 at the age of 14. He studied by correspondence course and at Birmingham Technical College, eventually gaining a place at Guy's. He was introduced to geriatric medicine at Oxford, and spent six months at the Cowley Road Hospital. After senior registrar appointments in both geriatric and general medicine in Sunderland and Newcastle, he was appointed to a consultant post in geriatric medicine at Stoke Mandeville Hospital before moving back to Oxford. Leo espoused the emerging principle of integrating geriatric medicine with general medicine, with joint training in both disciplines. He helped to change the image of geriatric medicine, attracting high calibre doctors to work with elderly people. He leaves a wife, Sylvia, and four children [G K WILCOCK]

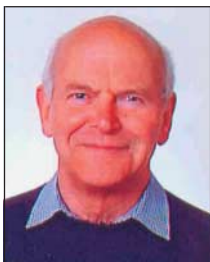
David Wolman



General practitioner Litherland near Liverpool 1956-91 (b Manchester 1928; q Manchester 1950; MRCP), died from a heart attack on 27 January 2005.

After qualifying David was a junior registrar at the Royal Albert Infirmary in Wigan. He entered the Royal Air Force and became medical officer to the RAF hospital at Padgate, Warrington, before entering general practice. After an assistantship in Preston he became a partner in an established practice in Litherland. David travelled to Philadelphia, United States, taking a group of brain damaged children to the Institute of Human Potential, which provided medical care for such patients. He was a member of the National Cactus Society, displaying many plants from his collections and winning many competitions. He leaves a wife, Audrey; two children; and six grandchildren. [SONIA GOLDBREIN, HARRIS WOLMAN]

Roger William Edmonds



Former general practitioner Andover, Hampshire (b 1931; q Guy's Hospital, London, 1954; FRCP), died from coronary heart disease on 10 December 2004.

Roger joined his practice in Andover in 1959, shortly before the town expanded rapidly to cope with the overspill from London. He put his surplus energy into building up vocational training and into medical politics, and battled for many years to secure the future of Andover War Memorial Community Hospital. He became provost of the Wessex faculty of the Royal College of General Practitioners in 1995. He retired to Kings Somborne in 1996 and obtained an MA in the history of art. He worked to conserve village life and the rural environment. He leaves a wife, Madeline, and three sons. [PETER BURROWS]

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